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BARBED WIRE SPIRAL

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3 Claims. (Cl. 256—8)

The invention relates to a wire spiral furnished with barbs. As adjacent convolutions of the spiral are connected one to another at either one point or several points of a winding, like an accordion, the spiral can be extended to a greater or a lesser degree in the direction of its longitudinal axis. Spirals of this type have been applied for military uses for some time. Whereas this known type of spiral has barbs wound individually on the supporting wire and has barbs fixed more or less loosely to it, the new idea constituting this invention is a flat metallic strip with edges so recessed as to form barbs and the strip so grooved and bent over as to envelop the supporting wire. The new barbed spiral has a considerably improved pricking effect, especially when recesses are cut tangentially from the edges, since this produces extremely sharp burr-like projections. The new design provides that the barbs are firmly and immovably fastened to the supporting wire. Besides, the new spiral is easy to manufacture. A further important advantage of the new spiral is that, when folded together, it demands far less storage space and room during transit than a spiral of equal length of the old type. This is also by reason of the radial arrangement of the barbed strip in relation to the axis of the spiral. Furthermore, this spiral is easier to extend than the known type since individual convolutions can hardly entangle outside of the points where they are firmly joined.

The use of barbed metal strip in the place of barbed wire is known. As may be seen from the foregoing, however, in this new combination barbed metal strip produces new effects.

In one embodiment of the invention reference is had to the accompanying drawing, in which:

Figure 1 represents a cross section along the line 1—1 of Figure 2;

Figure 2 shows a plan view of a section of the spiral on an enlarged scale;

Figure 3 represents a diagrammatic view of a spiral barrier.

Both edges of a flat steel strip or ribbon 1 are recessed from opposite side edges 6, 6' to form sharply pointed barbs 2 including arcuate sides 7. Recesses are cut opposite each other. A narrow bridge 4 is left between two opposing recesses. The strip is so grooved that it forms a continuous channel on its longitudinal axis along its entire length. The supporting wire 3 is of spring steel and is

embedded in the groove behind the ridge. When the wire has been placed into the channel or groove, the bridge sections 4 are bent over to envelop the wire firmly and tightly. As shown in Figure 3, individual convolutions of the wire spiral thus furnished with barbs are connected one to another at the points 5. Like an accordion the spiral can be extended to a greater or a lesser degree in the direction of its longitudinal axis. The barbed strip is arranged radially in relation to the longitudinal axis of the spiral, this position being subject to slight alteration during the process of extending.

What I claim is:

1. A barbed wire comprising an elongtaed metal ribbon provided with spaced alternate barbed and recessed portions on opposite sides of the longitudinal axis of said ribbon, the portion of the metal ribbon on the longitudinal axis at the barbed portions and at the recessed portions extending offset along said longitudinal axis of the ribbon and providing a continuous channel offset at one side from said barbed portions for snugly receiving a reinforcing wire therein, and a reinforcing wire tightly secured in said channel, said barbs extending in a substantially single plane tangentially of said channel, said barbed portions having arcuate sides merging from longitudinal edges of said ribbon into said channel.

2. A spirally wound barbed wire of the type described and comprised of a plurality of adjacent convolutions, said convolutions being connected to one another at a plurality of spaced points whereby the barbed wire may be expanded and contracted in the manner of an accordion in the direction of its longitudinal axis, each of said convolutions being constructed from an elongated metal ribbon provided with spaced alternate barbed and recessed portions on opposite sides of the longitudinal axis of said ribbon, the portion of the metal ribbon on the longitudinal axis at the barbed portions and at the recessed portions extending offset along said longitudinal axis of the ribbon and providing a continuous channel offset at one side from said barbed portions for snugly receiving a reinforcing wire therein, and a reinforcing wire tightly secured in said channel, said barbs extending in a substantially single plane tangentially of said channel, said barbed portions having arcuate sides merging from longitudinal edges of said ribbon into said channel.

3. A barbed wire of the type set forth in claim 2 wherein the metal ribbon is arranged in a substantially radial fashion with respect to the axis of the spiral formed by the said convolutions.

References Cited in the file of this patent

UNITED STATES PATENTS

255,763	Brock	Apr. 4, 1882
305,355	Upham	Sept. 16, 1884

FOREIGN PATENTS

603,941	Germany	Oct. 10, 1934
862,100	France	Nov. 22, 1940
746,940	Great Britain	Mar. 21, 1956